

New Haven, Connecticut
October 19, 1926.

Mr. Timothy N. Pfeifer
Room 1447 Equitable Building
120 Broadway, New York.

Dear Mr. Pfeifer:

On Saturday October 16th, I went to Somerville, New Jersey in company with Mr. Palzer for the purpose of examining shells and bullets which were exhibits in the Hall-Mills case.

Shells - There were three fired shells (Underwood Exhibit #9) of Peters Cartridge Co. make marked .32 A.C.P. or the size commonly known as .32 Auto. Colt. The shells were grooved and measurements were taken as follows:

Head Diam.	.3530"	-	.3535"
	.3545"	-	.3550"
	.3530"	-	.3535"

Body Diam.	.340"	-	.341"
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Length of shell	.673"	-	.675"
	.673"	-	.680"
	.672"	-	.6785"

On two of the shells extractor marks were plainly visible while the other shell failed to show marks. When the explosion takes place the cartridge is forced violently back against the breech block by the internal pressures causing the soft metal of the primer to take the imprint of the breech block or firing pin. The primers of all three shells showed characteristic marks on the breech bolt and firing pin. These markings were so numerous and distinct that the shells could be readily linked with the arm in which they were fired.

The firing pin indent was somewhat off center and from the measurements of the shells showing distortion in length we are able to learn the position in the chamber in which the shell reposed when fired and, therefore, say that the firing pin hits off center in the direction of ten o'clock.